

69141

Magnetochemistry of Active Centers. Stabilization of
Free Radicals on a Surface and Electron Paramagnetic
Resonance in Quinhydrone Salts

S/076/60/034/03/036/038
B005/B016

gratitude to Professor N. I. Kobozev for his interest in the present work. There
are 1 figure and 3 references.

SUBMITTED: November 22, 1959

Card 3/3

32637

S/076/62/036/001/007/017
B107/B110

11.1510

AUTHORS: Skorokhodov, I. I., Golubev, V. B., Nekrasov, L. I.,
Yevdokimov, V. B., and Kobozev, N. I.

TITLE: The higher hydrogen peroxide in frozen radicals. V. Electron
paramagnetic resonance study of peroxide radical condensates

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 1, 1962, 93 - 97

TEXT: The synthesis of the radical HO_2 either from dissociated water vapor or on reaction between pure ozone and atomic hydrogen at -196°C has been studied by the e.p.r. method. The purpose of the investigation was to check published data (Ref. 1, see below; Ref. 2: A. I. Gorbanev, S. D. Kaytmazov, A. M. Prokhorov, A. B. Tsentsiper, Zh. fiz. khimii, 31, 515, 1957; Ref. 3, see below; Ref. 9: S. D. Kaytmazov, A. M. Prokhorov, Zh. fiz. khimii, 34, 227, 1960) and to establish the maximum HO_2 concentration possible. The resonance spectra of both peroxide-radical condensates exhibit asymmetric maxima at 9000 Mc/sec, irrespective of the method of synthesis. The asymmetry is due to the anisotropy of the g -factor which

Card 1/4

32637

S/076/62/036/001/007/017

B107/B110

The higher hydrogen peroxide...

amounts to 2.009. The line width is about 75 oe. Synthesis from dissociated water vapor has shown that the ratio of unpaired electrons to the number of H_2O_2 molecules remaining after the decomposition of the condensate varies from 0 to 0.007, which agrees well with Ref. 1 (0.0065). The divergence from the value given in Ref. 2 (0.004) is explained as follows: The condensate is separated in the cooling trap in the form of two rings, one slightly above the level of liquid nitrogen, which is white and contains about 52% H_2O_2 but no HO_2 , while the other below the level is yellowish and contains about 54% H_2O_2 and the radical HO_2 . At $-110^\circ C$, the second ring turns white and the paramagnetic absorption diminishes. Synthesis from pure ozone and atomic hydrogen has shown that the ratio of unpaired electrons to the number of H_2O_2 molecules remaining after the decomposition of the condensate varies from 0.007 to 0.009. From the paramagnetic resonance spectrum alone it is not possible to decide whether the radical HO_2 or the hydroxyl OH is present. The presence of the perhydroxyl HO_2 is, however, supported by the following facts: The gamma spectrum of ice contains a symmetric doublet at $-196^\circ C$ (Ref. 13, see Card 2/4).

32637

S/076/62/036/001/007/017

B107/B110

The higher hydrogen peroxide...

below); the resonance spectrum of the condensate in question resembles the gamma spectra of organic compounds, such as Teflon, polyethylene, etc., which contain the radical C-O-O*, as well as the spectrum of the potassium peroxide K-O-O*; when the yellow ring becomes colorless between -110 and -100°C, 3 - 4% by weight of oxygen is separated. The value calculated for the recombination of the radical OH to H₂O and O₂ is

1 - 1.5% by weight, while that for HO₂ → H₂O₂ + O₂ is 2.5 - 3% by weight.

The presence of HO₂ is therefore very probable. The maximum concentration

obtained from the measurements amounts to 0.4% by weight. There are 18 references: 10 Soviet and 8 non-Soviet. The four most recent references to English-language publications read as follows: Ref. 1: R. L. Livingston, J. A. Ghormley, H. Zeldes, J. Chem. Phys., 24, 483, 1956; Ref. 3: C. K. Jen, S. N. Foner, E. L. Cochran, V. A. Bowers, Phys. Rev., 112, 1169, 1958; Ref. 13: J. M. Flournoy, L. H. Baum, S. Siegel, S. Scolnik, The fourth international Symposium of free radical stabilization, V, 1958; H. N. Rexroad, W. Gordy, Bull. Amer. Phys. Soc., 1, 200, 1956.

Card 3/4

The higher hydrogen peroxide...

32637
S/076/62/036/001/007/017
B107/B110

ASSOCIATION: Moskovskiy gos. universitet im. M. V. Lomonosova (Moscow
State University imeni M. V. Lomonosov)

SUBMITTED: April 5, 1960

X

Card 4/4

KAVALEROVA, Ye.V.; GOLUBEV, V.B.; YEVDOKIMOV, V.B.

Electron paramagnetic resonance of copper acetylacetonate adsorbed
on aluminosilicates. Zhur.fiz.khim. 37 no.1:226-227 Ja '63.
(MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.; KUZNETSOVA, M.N.; YEVDOKIMOV, V.B.

Transformations in the quinone-semiquinone-hydroquinone series
in alkaline medium. Part 1. Zhur. fiz. khim. 37 no.12:2795-
2796 D '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.; YEVDOKIMOV, V.B.

Electron paramagnetic resonance in zinc oxide subjected to
mechanical treatment. Zhur. fiz. khim. 38 no.2:477-478 F '64.
(MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.R.

Modernization of the industrial Re-1301 (EPR-2)-type radio-
spectrometer. Zhur. fiz. khim. 38 no.9:2320-2323 S '64.

(MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.; LEVDOKIMOV, V.B.; KIREYENKO, G.M. (Moscow)

Physical state of α,α -diphenyl- β -picrylhydrazyl on various carriers studied by the electron paramagnetic resonance method. Zhur. fiz. khim. 39 no.2:381-385 F '65. (MIRA 18:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.; YEVDOKIMOV, V.B.

Interaction of α,α -diphenyl- β -picrylhydrazyl with solid surfaces.
Zhur. fiz. khim. 39 no.2:493-495 F '65. (MIRA 18:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GOLUBEV, V.B.

Electron paramagnetic resonance of hydrogen atoms stabilized
on aluminosilicate catalysts of various composition. Zhur.
fiz.khim. 39 no.10:2606-2608 O '65.

(MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted July 24, 1964.

L 36504-66 EWT(m)/EWP(j)/T RM/WH/JWD

ACC NR: AP6015092

SOURCE CODE: UR/0020/66/168/001/0122/0125

AUTHORS: Belevskiy, V. N.; Bugayenko, L. T.; Golubev, V. B.

ORG: Moscow State University im. M. V. Lomonosov. (Moskovskiy gosudarstvennyy universitet)

TITLE: Kinetics of the decomposition of radicals in frozen aqueous solutions of NaClO_4 and HClO_4

SOURCE: AN SSSR. Doklady, v. 168, no. 1, 1966, 122-125

TOPIC TAGS: free radical, chemical kinetics, electron spin resonance

ABSTRACT: Kinetics of the disappearance of the hydrogen atoms (I) and hydroxyl (II) and chlorine trioxide (III) radicals in a frozen aqueous solution of NaClO_4 and HClO_4 irradiated with Co^{60} γ -rays were investigated by means of ESR. Such a study should clarify the mechanism by which the molecular products of radiolysis are formed. Solutions were frozen in glass ampules 2--2.5 mm thick and irradiated with γ -rays in doses of $\sim 3 \times 10^{16}$ ev/ml/sec at -196°C . Modification of the continuous method described by V. B. Golubev (ZhFKh, 38, 2320, 1964) was employed in following the reaction kinetics. A typical decomposition curve is shown in Fig. 1. For short reaction times the process was strictly of second order for I and III, but of mixed order for II.

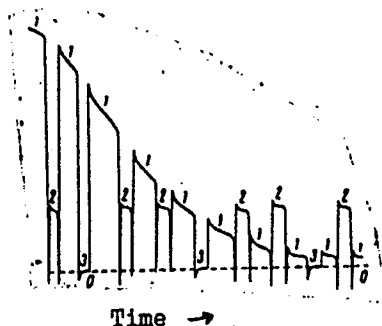
UDC: 541.15+541.515+541.127

Card 1/2

L 36504-66

ACC NR: AP6015092

Fig. 1. Typical disappearance curves for radicals at -140°C in 5 M HCIO_4 : 1 - signal from test sample; 2 - signal from standard; 3 - calibration line.



For an extended reaction time the process was of the first order for all investigated radicals. Activation energies for the disappearance of I and III were determined, and it was found that the activation energy of the disappearance of H in HCIO_4 is twice that in NaClO_4 . This paper was presented by Academician A. N. Frumkin on 12 August 1965. Orig. art. has: 4 figures, 1 table, and 3 equations.

SUB CODE: 07/ SUBM DATE: 23Jul65/ ORIG REF: 006/ OTH REF: 003

Card 2/2/LLP

1. GOLUBEV, V. D.
2. USSR (600)
4. Soils - Volga Valley
7. Green manure is an important means for increasing fertility of chestnut soils in the Trans-Volga region, Sov. agron., 10, No. 11, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

GOLUBEV, V. D.

USSR/Cultivated Plants - Grains.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82317

Author : Golubev, V.D.

Inst :

Title : Green Fertilizers Under Irrigated Corn in Povolzh'ye

Orig Pub : S. kh. Povolzh'ya, 1957, No 3, 25-26

Abstract : An effective method of increasing the corn yield in Povolzh'ye on irrigated chestnut soils is organic fertilizing. With an insufficiency of manure, it can be substituted with green fertilizer. Sowing trigonella after spring wheat harvest produces about 1, tons/ha of green bulk which is plowed under in October. Corn planted over the green manure produces an increase of 14 to 24% in the yield of green bulk. -- O.V. Yakushkina

Card 1/1

- 36 -

GOLUBEV, V. G.

14

"Determination of iodine in natural waters. V. G. Golubev and L. A. Shinkovskaya (Moscow Regional Sanit. Inst.). *Gigiena i Sanit.* 1952, No. 2, 17-20. To det. I, a 1:3:1 sample is made alk. to phenolphthalein with K_2CO_3 , concd. to a small vol., and dried at 40° to destroy org. matter. The residue is extd. 3 times with $EtOH$, the ext. evapd., dild. with H_2O , neutralized with H_2SO_4 , made slightly acid with 2.5 ml. 0.1 N H_2SO_4 and 0.2 ml. fresh Br added, boiled 5 min., and cooled. A few grains of KI is added, and the soln. is titrated with hyposulfite for the liberated I.
G. M. Kuznetsov

Moscow

VASHKOV, Vasilii Ignat'yevich; GOLUBEV, V.G., redaktor; GABERLAND, M.I.,
tekhnicheskiiy redaktor

[Disinfection, and the eradication of insects and rats; a manual
for physicians] Dezinfektsiia, dezinseksiia i deratizatsiia; ruko-
vodstvo dlia vrachei. Izd. 2-oe, perer. Moskva, Gos. izd-vo med.
lit-ry, 1956. 731 p. (MIRA 10:1)

(DISINFECTION AND DISINFECTANTS)

(INSECTS, INJURIOUS AND BENEFICIAL)

(RODENT CONTROL)

GOLUBEV, V.I.

Detection of cracks under the wheel-base by the Zverev method. Moskva, Gos. transp. zhel-dor. izd-vo, 1943. 27 p. (50-40925)

TF386.G6

GOLUBEV, V. I.

Izgotovlenie i vosstanovlenie vagonnykh detalei svarkoi. Moskva, Transzheldorizdat, 1944. 25 p. illus. (Opyt mobilizatsii vnutrennikh resursov)

Manufacturing and repairing car parts by welding.

DLC: TF376.G59

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

Golubev, V.I.

GOLUBEV, Vladimir Ivanovich; TUROVTSEV, Vasilii Ivanovich; ARSHINOV, I.M.
redaktor; RUDZON, D.M., tekhnicheskii redaktor.

[Inspection and repair of railroad cars. Osmotr i remont vagonov
v proezdakh. Moskva, Gos.transp. zhel.dor. izd-vo 1954. 129 p.

[Microfilm]

(MLRA 9:1)

(Railroads--Cars--Maintenance and repairs)


S/149/62/000/004/001/003
A006/A101

AUTHORS: Nichkov, I. F., Raspopin, S. P., Golubev, V. I.

TITLE: Anodic dissolving of tantalum in chloride melts

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, no. 4,
1962, 132 - 136

TEXT: To replace methods of mechanically removing tantalum coatings by the electrolytical method, anodic dissolving of tantalum in KCl-LiCl melts was investigated at 400 - 700°C (Fig. 1). Corrosion of tantalum metal was determined in the melts, to analyze the results of anodic dissolving. Anodic polarization of tantalum metal was experimentally investigated, to evaluate the sequence of anodic dissolving processes. Results: Tantalum corrosion in the melts investigated is low and increases with elevated temperatures. It changes slightly when fluorides are added to the melt. Highest current efficiency is obtained in a chloride bath with a current density below 0.5 amp/cm². At an increase of anode current density from 0.03 to 1.0 amp/cm² the portion of tantalum ions of higher valence passing into the electrolyte, increases. As a result the anodic current efficiency drops. Results of measuring the anodic potentials show that with a higher anodic current density



Card 1/1

Anodic dissolving of tantalum in chloride melts

S/149/62/000/004/001/003
A006/A101

the anodic potential is shifted toward more positive values (figure 2). The addition of alkali metal fluorides to the electrolyte shifts the anode potential to the negative side and stabilizes tantalum dissolving, accompanied by the appearance of ions of higher valence. Polarization curves are shifted to the negative side at increasing temperatures due to the presence of Nb in tantalum metal. There are 2 tables and 3 figures.

ASSOCIATION: Ural'skiy politekhicheskiy institut (Ural Polytechnic Institute)

SUBMITTED: January 17, 1962

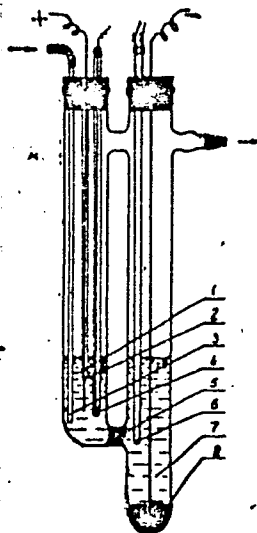
Card 2/4

Anodic dissolving of tantalum in chloride melts

S/149/62/000/004/001/003
A006/A101

Figure 1: Electrolyzer

Legend: 1 - anolyte; 2 - tantalum anode, protected by a porcelain tube; 3 - tube for blowing the electrolyte with dry hydrogen chloride; 4 - lead comparison electrode; 5 - asbestos diaphragm; 6 - thermocouple; 7 - catholyte; 8 - bismuth cathode.

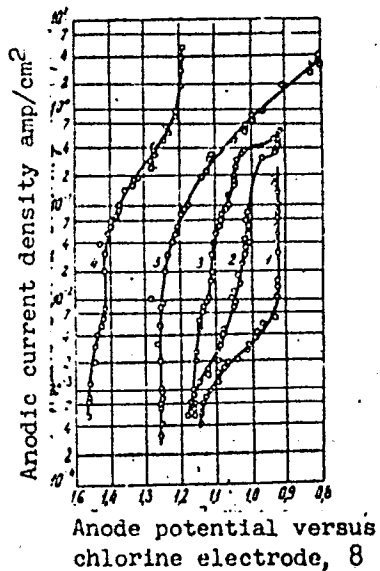


Card 3/4

Anodic dissolving of tantalum in chloride melts

S/149/62/000/004/001/003
A006/A101

Figure 2: Dependence of the tantalum anode potential upon current density in a KCl-LiCl melt at 1 - 400°C; 2 - 600°C; 3 - 700°C; 4 - 500°C with addition of 5 weight % LiF to the electrolyte; 5 - at 400°C for a columbium anode in a KCl-LiCl melt.



Card 4/4

MELESHKEVICH, P.S.; POCHTAR', Yu.S.; GOLUBEV, V.I.

Stand for testing towing devices. Mashinostroitel' no.8:31
Ag '62. (MIRA 15:8)
(Testing machines)

MELESHKEVICH, P.S.; POONTAR', Yu.S.; GOLUBEV, V.I.

Hydraulic press of 500-ton capacity for assembly and press-fitting
operations. Kuz.-shtam. proizv. 4 no.9123-25 8 '62.

(MIRA 15:9)

(Hydraulic presses)

AUTHORS:

08722

PSYCHOLOGICAL

4-257816-7

DATE _____

[illegible]

Q12

The activities may be ascertained by 2 nuclei clusters, a shield consisting of depleted uranium, and shield 2 of copper, and additional shield can be fastened on one side on to the shield with a diameter of 70 cm, so that total dimensions can be increased to 60 × 100 cm. With this reactor installation were carried out all the spatial and energy distribution of the neutrons, of which the results are shown in a table for μ_1 779 (n,t), μ_2 35 (n,t), μ_3 15 (n,t), μ_4 210 (n,t), μ_5 240 (n,t), μ_6 238 (n,p), μ_7 197 (n,p), μ_8 238 (n,n), Measurement of the conversion factor. The ratio was determined experimentally according to 2,4 to 2,5; it was also calculated by means of the multi-group computation method in 3rdth approximation (Ref. 1). The electronic computer was used under the supervision of Professor V. S. Kuznetsov. For computation the experimental values for μ_1 of V. I. Kabanovskii (Ref. 5), G. M. Sakhmulin (Ref. 6), B. E. Shtarkov (Ref. 7), and for a the values obtained by P. G. Sukharov (Ref. 8), V. M. Andreyev (Ref. 9) were used. As a result of computations the coefficient was found to amount to 2,6.

The Distribution of Neutrons in Uranium

The cross sections of the various reactions for the equilibrium spectrum and for the asymptotic spectrum of the incident uranium are determined both theoretically and experimentally. The asymptotic length of diffusion determined experimentally and theoretically amounts to 9.1 ± 0.1 cm. The average number of fissions of uranium 238 caused by fission neutrons amounts to 0.17 ± 0.01 . This is in agreement with the data given by reference 10.

Furthermore, the influence exerted by the resonance structure of the cross sections upon the spatial distribution of the neutrons is investigated. E. D. Mirshakova showed that for neutrons with 24 keV the total cross section for copper is reduced by about three times its amount with a modification of target thicknesses of from 0.5 to 90 mm. There are 12 figures, 7 tables, and 15 references. 9 of which are Soviet.

(Continued on abstract 775)

Card 5/4

AUTHORS:

300/80-1-7-15
Lepachuk, A. I., Jurev, A. I., Andreyev, V. M., Burenkov,
A. I., Boudarenko, I. I., Gilev, V. I., Golubev, V. I., Gulin,
A. D., Kuznetsov, A. D., Kiselevich, O. D., Kozlov, N. V.,
Krasovskiy, N. V., Kuznetsov, B. D., Kozlov, V. M., Kozlov,
M. S., Kiselevich, O. D., Kiselevich, V. I., Kiselevich, P. I.,
Kiselevich, L. M., Kiselevich, N. I., Sherman, L. V.

TITLE:

PHYSICAL:

ABSTRACT:

Card 1/6

Investigations of the Physics of Reactors with Fast Neutrons. II
(Continued from abstract 6/23)
Atomic Energy, 1976, Vol. 3, No. 3, pp. 264-29 (USSR)
The reactivity and the kinetics of the reactor were measured.
It could be shown that in the center of the active zone the
weight of the 3 MeV neutrons is higher by $\sim 15\%$ than that of
230 MeV neutrons. The effective yield of the delayed neutrons
in the reactor with a uranium shield exceeds that of a reactor
with a copper shield by $1/4$ times its amount.
Reactor No. 1)
The active plutonium zone is the same as in reactor Br-1. In
the center of the reactor a water-uranium channel is provided,
which is separated from the plutonium zone by a uranium layer

g 143941

Card 2/6

of 8 cm thickness. The uranium-water lattice consists of
cylindrical slugs of normal uranium, which have a diameter of
35 mm. The channel material is stainless steel. The ratio between
water and uranium is 0.35. The lattice spacing is 1.5 mm.
The active zone is separated from the uranium lattice by means
of with the pure uranium layer shown.
1) The conversion factor is reduced from 2.45 ± 0.10 to
 1.7 ± 0.3 .
2) In the case of a fixed power output of the active zone the
reactivity with which the total quantity of plutonium 239 and
uranium 235 is formed was increased by 35%.
3) The velocity with which plutonium is produced increased by
1.6 times its amount.
4) In the case of a fixed power output of the active zone the
total power output of the reactor is increased by 2.8 times its
amount.
Reactor No. 2)
This reactor was described more in detail in references 1) and
2). The active zone is separated from the uranium lattice by
means of a layer of 120 cm of the active zone of the reactor Br-2, which consists
of plutonium rods. Mercury is used as a coolant, which takes up

Card 3/6

90% of the total volume of the active zone. The regulating
rods (insertion of shield) are made from a copper-nickel alloy.
The external shield consists of uranium slugs canned with
stainless steel. Thickness ~ 25 cm. The uranium shield is sur-
rounded by copper of 15 cm thickness.
The presence of mercury in the active zone leads to a decrease
of the content of fast neutrons in the spectrum. The conversion
factor was 1.6 ± 0.2 .
Theoretically the kinetic equation for this reactor was cal-
culated by O. I. Lapkov according to the method developed by
V. S. Vladimirov. Theoretical calculations of the effective
mass was carried out with an error of 5% and that of the effective
mass of the delayed neutrons was found to amount to 0.4%.
While the experimental value was 0.24 ± 0.04 . There are 7
figures, 1 table, and 15 references, 9 of which are Soviet.

AUTHORS: Nikolayev, M. N. , Golubev, V. I. , SOV/ 56-34-3-37/55
 TITLE: The Fission of U^{238} (Deleniye U^{238})
 PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1950,
 Vol. 34, Nr 3, pp. 752 - 754 (USSR)

ABSTRACT: The present work describes the measurements carried out in 1954, of the total number D of fissions taking place in an infinite uranium block when a fission neutron is entering it. In the center of a hollow sphere of natural uranium (outer radius 25 cm, radius of inner hollow space 5 cm) a disk of U^{235} ("Converter") was mounted. The beam of thermal neutrons coming from a reactor of an atomic power station was directed to the converter which served as source of the fission neutrons. The upper hemisphere contained a vertical channel which was filled with uranium charges and between these the detectors could be mounted. Plane fission chambers with layers of natural and enriched uranium served as detectors. By comparison of the counting results of these chambers in an equal flow of thermal neutrons the distributions of

Card 1/2

SOV/ 56-34-3-37/55

The Fission of U^{238}

the fissions of U^{238} and U^{235} could be computed from the distributions measured. A diagram gives the distribution obtained this way. The corrections to be taken into account in the determination of D are shortly discussed. The here found value of D amounts to 0.17 ± 0.01 . From this value of D k_{∞} for pure uranium can be determined: $k_{\infty} = D\nu_8/(1 + D\nu_8)$.

ν_8 denoting the mean number of neutrons liberated per fission of one U^{238} nucleus. With $\nu_8 = 2.85 \pm 0.06$ the value $k_{\infty} = 0.325 \pm 0.011$ is obtained. When the propagation of the neutrons which can fission U^{238} are expressed by the kinetic equation by Payerls, D will be connected with the known parameters α and β by the equation $D = \sigma_{f8} N / (\alpha - \beta)$. By means of this equation also $\alpha = 0.201 \pm 0.007$ and $\beta = 0.115 \pm 0.004$ were found. The distribution of the fissions of U^{238} computed by using these parameters is given in a diagram. The method used in these experiments is also suitable for the measurement of the transport parameters of various substances at various energies. There are 1 figure and 2 references, 1 of which is Soviet.

SUBMITTED: November 25, 1957

Card 2/2

(4) 23

WILDER I BOOK EXPLOITATION

507.2583

International Conference on the Peaceful Uses of Atomic Energy.
2nd, Geneva, 1958.

Library Sovietika unobshch; yadernyye reaktory i yadernaya energiya. (Reports of Soviet Scientists) Nuclear Reactors and Nuclear Power Moscow, Atomizdat, 1970. 707 p. (Series: Itogi nauki, vol. 2) Krynka slip inserted. 8,000 copies printed.

senior Research Fellow, Corresponding Member, USSR Academy of Sciences, A. E. Evreinov, Doctor of Physical and Mathematical Sciences, A. I. Leipunskiy, Member, Ukrainian SSR Academy of Sciences, I. I. Polonskiy, Corresponding Member, USSR Academy of Sciences, and V. S. Alyabiev, Doctor of Physical and Mathematical Sciences, Ed. A. P. Alyabiev, Tech. Ed.: Ye. I. Nizel.

FOREWORD: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

Coverage. The six second volumes of a six-volume collection on the present-day status of nuclear energy, published by Pergamon Press, Oxford, England, in 1968, are devoted to atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 5 consists of three parts. The first is devoted to atomic power; the second, to nuclear construction in the Soviet Union; the second to experimental nuclear construction in the Soviet Republics; the third, which is predominantly theoretical, contains the papers of the participants carried out on bombs, and the research reactors, the experiments, and the methods for improving them; and the fourth, which is devoted to the development of nuclear energy, contains the reports of the participants in the symposium on the development of nuclear reactor physics and construction engineering in the USSR. The editor of the set is V. A. Kuznetsov, Academician of the Academy of Sciences of the USSR, and the scientific editor of this volume. See SOG70261 for titles of all volumes of the set. References appear at the end of the articles.

PART IX. SUPPLEMENTAL AND RESEARCH REACTORS

L. K. Kozlov, V. G. Gerasimov, N. N. Artyukhova, I. I. Bondarenko, O. D. Kachanovskiy, O. I. Lushchikova, S. A. Sakhov, and V. A. Kozlovskiy, V. I. Ustinovskiy, L. A. Ustinovskiy, and E. L. Stetsko. Experimental and Theoretical Researches in the USSR (Moscow, 1972).

Elkhin, I. F., V. A. Delyatovskiy, I. S. Gerasimov, Yu. M. Gerasimov, S. V. Gerasimov, and G. D. Delyatovskiy. Plot-plant method for determining the criticality of a reactor with variable and fissionable U₆ (Report No. 2502)

Some New and Rebuilt Thermal Research Reactors (Report No. 2185)

Andriyovich, B.V., P. Ya. Anisimov, V.I. Glushko, P. Ya. Glushko and A. A. Gorbunov. Dismantling an Experimental Graphite-grenium Isotope Producing Reactor After Four Years of Operation (Report No. 2297)

PUBLISHED BY, J.S.-D. Vozob'nyy, V.M. Gruzey, V.B. Kuznetsov,
V.V. Lyubchenko, and Y.A. Tsykalo. An Intermediate Research
for Obtaining High Intensity Neutron Fluxes (Report No. 2142)

PART III. PHYSICS AND ENGINEERING OF REACTOR DESIGN

Lyudmila A. A. Abramova, V. N. Andreyev, A. I. Baryshnikov, A. I. Bonch-Bruyevich, V. I. Galinov, K. I. Golubev, A. D. Ginzburg, A. I. Kuznetsov, O. D. Lazebnikov, V. I. Loshakov, N. V. Lukatskiy, A. A. Mironov, V. N. Morozov, N. B. Morozov, M. A. Moshayev, G. N. Salakhov, V. I. Slavov, V. I. Ushakov, L. N. Ushakov, N. I. Pelyayev, D. I. Chernikov. Research on the Physics of Fast Neutron Reactors (Report No. 2538)

Y. K. and B. L. Ioffe. Homogeneous Natural Uranium Reactor
(Report No. 2296)

Report No. 2145)

1409enb, V.A. Self-regulation in a Water-water Power Reactor
Report No. 2185)

GOLUBEV, V. I., ARAGHIAN, A. A., ORLOV, M. YA., AND NIKOLAYEV, M. N.

Neutron Propagation in the Nickel Screen of a Fast Reactor.

paper submitted for the IAEA Seminar on the Physics of Fast and Intermediate Reactors, Vienna, 3-11 Aug 1961.

21109

S/089/61/011/006/005/014

B102/B138

21.6000

AUTHORS: Golubev, V. I., Ivanov, V. I., Nikolayev, M. N.,
Smirenkin, G. N.

TITLE: Use of resonance indicators for investigating neutron spectra
in fast reactors

PERIODICAL: Atomnaya energiya, v. 11, no. 6, 1961, 522 - 527

TEXT: The authors studied the possibilities of using resonance indicators for investigating the low-energy part of neutron spectra in the reflectors of fast reactors. The resonance blocking method is discussed in detail. In this case, the indicator foil is covered on both sides by thin shielding layers, except in the vicinity of resonance at $E = E_0$.

Resonance neutron flux can be calculated by measuring the activity difference

$$\Delta A = \varphi(E_0) \frac{\pi}{2} \Gamma \Sigma_0 \alpha \eta +$$

$$+ 2 \int \Sigma_a(E) \Sigma_c(E) \left\{ 1 - \frac{1}{2} \times \right.$$

$$\times E i[-\Sigma_c(E) t] \left. \right\} \varphi(E) dE. \quad (1)$$

Card 1/04

Use of resonance indicators...

21409
S/089/61/011/006/005/014
B102/B138

of the resonance parameters, for determining blocking factor η are known. $\varphi(E)$ is neutron flux, Γ_γ the radiation width, $\Sigma_{0,a}$ activation cross section in the resonance maximum, Σ_a and Σ_c activation cross section of the indicator isotope and total absorption cross section of the indicator respectively. η is calculated on the basis of the Gurevich-Pomeranchuk theory of resonance absorption (e. g., G. I. Marchuk, Chislennyye metody rascheta yadernykh reaktorov (Numerical methods for reactor calculation), M. Atomizdat, 1958). With $\beta = \Sigma_0 t$ and $\beta_0 = \Sigma_0 t_0$, the ratios between filter thickness t and indicator thickness t_0 and the "draw-out-length" of neutrons from the resonance region l/Σ_0 , corresponding to its maximum,

$$\begin{aligned} \eta(\beta, \beta_0) = & f(\beta_0) - f(\beta) \left(2 + \frac{\beta_0}{\beta} \right) + \\ & + \frac{e^{-\frac{\beta}{2}}}{\beta} \left[\left(\beta + \beta_0 - \frac{\beta^2}{12} + \frac{\beta_0^2}{192} \right) I_0 \left(\frac{\beta}{2} \right) + \right. \\ & \left. + \left(\beta + \frac{\beta_0}{2} + \frac{\beta^2}{12} - \frac{\beta_0^2}{192} \right) I_1 \left(\frac{\beta}{2} \right) \right]. \end{aligned} \quad (6)$$

Card 2/ 4

21409

S/089/61/011/006/005/014
B102/B138

Use of resonance indicators...

is found. This relation is used for calculating the blocking factors (cf. Table 1). I_0 and I_1 are zeroth and first-order Bessel functions of an imaginary argument. Good indicators will show a broad energy gap between first and second resonance activation cross sections. Table 2 gives the characteristic parameters of several isotopes which are recommended as indicators. Only for In^{115} , Au^{197} (broad resonance) and La^{139} (narrow

resonance), the relation $\Sigma_0' = \begin{cases} \Sigma_0 & \text{for } \Gamma \ll \xi E_0 \text{ (narrow resonance)} \\ \Sigma_0 \frac{\Gamma}{\Gamma_1} & \text{for } \Gamma \gg \xi E_0 \text{ and } \Gamma \approx \Gamma_1 \text{ (broad resonance)} \end{cases}$

holds; for the others, Σ_0' has to be determined experimentally. If the contributions of higher resonances to the neutron spectrum are negligible, the activity induced by first-resonance neutrons may be determined by the so-called "1/v law". This method is demonstrated for two isotopes, the first of which has resonance at $E = E_0$, the second one obeys the 1/v law ($\text{B}^{10}(\text{n}, \alpha)$). The neutron flux is determined from

Card 3/8 4

21109

S/089/61/011/006/005/014

B102/B138

Use of resonance indicators...

$$\varphi(E_0) = \frac{A_1 - A_2 \frac{\sum_{n=1}^m \zeta_1}{\sum_{n=1}^m \zeta_2}}{\frac{\pi}{2} \Gamma_Y \Sigma_0 \zeta_1} \quad (8).$$

This method was used to determine the flux distributions of the 4.9-ev resonance neutrons in the reflector of the BP-5 (BR-5) reactor. A gold foil of 1.38 mg/cm^2 ($\beta_0 = 0.14$) with gold filters of 3.05 and 6.10 mg/cm^2 ($\beta = 0.31$ and 0.62) was used. Results are shown graphically and discussed in brief. The 2.95-kev neutron flux in the Ni reflector of a BP-1 (BR-1) reactor was also measured by this method, using a Na_2CO_3 indicator foil as $1/v$ detector. The authors thank A. I. Leypunskiy for interest, and I. I. Bondarenko and V. V. Orlov for discussions. There are 4 figures, 2 tables, and 4 Soviet references.

SUBMITTED: April 17, 1961

Card 4/4

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from different materials on an increase
in neutron capture by the uranium shielding of a fast reactor.

Atom. energ. 15 no.3:258-259 S '63. (MIRA 16:10)

(Neutrons—Capture) (Nuclear reactors)

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from various materials on the number of
neutrons captured in the uranium carbide shield of a fast reactor.
Atom. energ. 15 no.4:327-328 0 '63. (MIRA 16:10)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

...uranium carbide for metallic uranium. On sub-

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

CIA-RDP86-00513R000515910014-5

7. 7. , UZLEKUZU, V. 8.

214

CIA-RDP86-00513R000515910014-5"

ABSTRACT: Results are presented of an experimental and theoretical study of the

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

... the results. ...

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

ASSOCIATION: none

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

L 7641-66 EWT(1)/EWA(h)

ACC NR: AP5024982

SOURCE CODE: UP/0286/65/000/016/0044/0044

AUTHOR: Golubev, V. I.

29

B

ORG: none

TITLE: Pulse length selector. Class 21, No. 173806

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 44

TOPIC TAGS: pulse analyzer, differentiating circuit

ABSTRACT: This Author Certificate presents a pulse length selector containing a series connection of a differentiating circuit, a driven multivibrator, a second differentiating circuit, and a coincidence circuit which is also connected to the output of the first differentiating circuit (see Fig. 1).

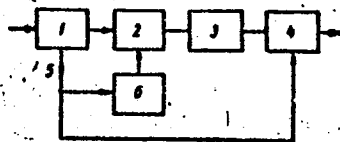


Fig. 1.

Card 1/2

UDC: 621.374.33

L 7641-66

ACC NR: AP5024982

Fig. 1. 1- differentiating circuit; 2- driven multivibrator;
3- second differentiating circuit; 4- coincidence circuit;
5- output of first differentiating circuit; 6- delay circuit

To eliminate spurious response, the mentioned output of the first differentiating circuit is connected to the output of the driven multivibrator through a delay circuit whose delay time is equal to the length of the trailing edge of the selected pulse. Orig. art. has: 1 diagram.

SUB CODE: EC/ SUBM DATE: 05Mar64

Card 2/2

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5

ASSOCIATION: MISS; Novokuybyshevskiy filial MISSa (Novokuibyshev Branch of

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000515910014-5"

62
MENYAYLO, A.T.; GOLOVANENKO, B.I.; GOLUBEV, V.K.; YAKOVILEVA, A.K.

Production of primary higher fatty alcohols from ethylene.
Khim. prom. 41 no.5:323-325 My '65. (MIRA 18:6)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov i Novokuybyshevskiy filial Nauchno-issledovatel'skogo instituta sinteticheskikh spirtov i organicheskikh produktov.

ZAMBERKIN, L.I.; GAVRILENKO, V.V.; GOLUBEV, V.K.

Addition of sodium aluminum hydride to olefins. Izv. AN SSSR
Ser.khim. no.1:142-143 '66. (NIS 12:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Sub-
mitted April 29, 1965.

SAKHAROVSKIY, N.A.; CHERKASHENINOV, V.I.; GOLUBEV, V.L.

Foreign technology. Gaz. prom. 8 no.8:49-51 '63.

(MIRA 17:11)

NOSIK, A.F. [deceased], prof.; LITVISHKO, N.T., dots.; GOLUBEV, V.M.,
student

Epizootology and control of trichinosis. Veterinariia 35 no.5:72-73
My '58. (MIRA 12:1)

1. Khar'kovskiy veterinarnyy institut.
(Trichina and Trichinosis)

PYRKOV, L.M.; GOLUBEV, V.M.; FRENKEL', S.Ya.

Some data on the hydration of globular proteins in concentrated solutions. Biokhimiia 29 no. 1:58-64 Ja-F '64. (MIRA 18:12)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR, Leningrad.
Submitted April 8, 1963.

SHIRYAYEV, A.M., inzh.; GOLUBEV, Y.N., inzh.

Steel foil reinforced crimped paper pipes for electric wirings.
Bul. tekhn. inform. 4 no. 8:19-20 Ag '58. (MIRA 11:8)
(Pipes) (Electric wiring)

GOLUBEV, V.N. ---

"Plants of the Moscow Natural Flora With Storage Organs of Shoot Origin."
Cand Biol Sci, Moscow Oblast Pedagogical Inst, 21 Oct 54. (VM, 8 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

GOLUBEV, V.N.

Biological significance of geophily in herbaceous plants.
Bot.zhur.41 no.2:236-242 F '56. (MIRA 9:7)

1.Smolenskiy pedagogicheskiy institut.
(Plants--Frost resistance) (Roots (Botany))

GOLUBEV, V.N.

Ontogenesis of rhizomes in branched-root plants. Bot.zhur.41 no.2:
248-253 P '56. (MLRA 9:7)

1.Smolenskiy gosudarstvennyy pedagogicheskiy institut imeni Karla
Marksa. (Roots (Botany))

GOLUBEV, V.N.

Ontogeny of the European starflower (*Trientalis Europaea* L.) and
some features of rhizome development in herbaceous plants. Biul. MOIP
Otd. biol. 61 no.1:73-76 '56 (MIRA 9:6)

(STARFLOWER) (ROOTS (BOTANY))

Golubev, V. N.
USSR/ Biology - Plant morphology

Card 1/1 Pub. 22 - 48/54

Author: Golubev, V. N.

Title: Morphogenetic regularities of rhizomes in herbaceous plants and certain problems of their origin

Periodical: Dok. AN SSSR 106/2, 351-354, Jan 11, 1956

Abstract: Biological data are presented regarding morphogenetic regularities of rhizomes in herbaceous plants and their origin. Eleven references: 7 USSR and 4 German (1850-1954). Illustrations.

Institution: Smolensk State Pedagogical Inst. im. K. Marks

Presented by: Academician A. L. Kursanov, November 3, 1955

Golubev, V.N.

AUTHOR: Golubev, V.N., Candidate of Biological Sciences 26-12-24/49

TITLE: Vegetative Propagation of the Marsh Marigold (O vegetativnom razmnozhении kaluzhnitsy bolotnoy)

PERIODICAL: Priroda, 1957, No 12, pp 95-96 (USSR)

ABSTRACT: The marsh marigold, *Caltha palustris* L., grows in wet meadows, river banks and marshes. Its leaves are poisonous and can cause serious illness and even death to horses and cattle when eaten fresh off the ground. The marigold multiplies by seeds. Another way of propagation is by means of its creeping stalks, as observed by the author. The stalks of the plant are comparatively long. When the blossoms have faded, these stalks, which hitherto have been growing erect, spread upon the ground. From the stalks, at certain intervals, bunches of roots start growing with clusters of leaves on top. By the beginning of fall, the roots have penetrated into the ground, and the connection with the mother plant is separated. One stalk can produce from 2 to 3 of such clusters, if the ground is sufficiently wet. The best protection is to cut off the shoots early in spring or to drain the pastures. There are 1 figure and 3 references, all of which are Slavic (Russian)

~~Card 1/2~~

Smak Pedagogical Inst.

GOLUBEV, V. N.

GOLUBEV, V. N.

Morphogenesis and evolution of growth forms in herbaceous plants of
the forest-meadow zone [with summary in English]. Biol. MOIP. Otd.
biol. 62 no.6:35-57 N-D '57. (MIRA 11:1)

(Botany--Morphology)

GOLUBEV, V.N.

Short rhizome plants [with summary in English]. Biul.MOIP.Otd.biol.
63 no.3:97-103 My-Je '58. (MIRA 12:3)
(ROOTS (BOTANY))

AUTHOR: Golubev, V. N. SOV/ 20-120-1-54/63

TITLE: On the Morphogenesis of Vital Forms of Herbaceous Plants in West Siberia (O morfogeneze zhiznennykh form travyanistykh rasteniy Zapadnoy Sibiri)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 1, pp. 195-198 (USSR)

ABSTRACT: Without a thorough analysis of the morphogenesis of the plants the perception of the development of their vital forms is out of question. Now the necessity of this study becomes mature for the whole plant structure including the over- and underground organs. Such experiments are not unfrequent in public tions (Refs 3,4,7-9). In this communication the author gives results of such studies of dicotyledon herbaceous plants of the south conifer wood-and wood-steppe zone on the meridian of Omsk. The structural particularities of the subterranean organs, worked out by G. N. Vysotskiy (Ref 1) and L. I. Kazakevich (Ref 5) were made the basis of the work. Also interest was given to the development of the overground organs from the time of the germ formation wards. The author tried to reproduce the corresponding morphogenetic connections of various types of sprout development and of the vital forms as a

Card 1/4

On the Morphogenesis of Vital Forms of Herbaceous Plants in ³⁰20-120-1-54/6
West Siberia

whole, which have an importance as natural evolutionary relationships. Only the main vital forms were investigated:
a) Stalk-root-(sterzhnekornevyie), b) tuber- or brush-root-(kistekornevyie), c) loose-shrub-(rykhlokustovyye) and d) long root-stock-plants (dlinnokornevishchnyye).
a) Among the polycarpous of this group several development types of the sprout system can be separated out: 1) The most numerous are plants, of which the main sprout and the sprouts of subsequent generations in sequence pass the phases: The bud, the rosette sprout, and the leafed elongated generative type. In the rosette state the sprout grows monopodially, but the reproduction becomes sympodial with the transition to the florogenesis. As the duration of the rosette phase according to the existence conditions lasts for 2 and more years, this group can be called di- resp. polycyclons. From this group sympodial rosette forms are derived (Taraxacum erythrospermum). The internodes of the leaf-carrying sprout are shortened, by which process the leaf rosette is formed, while the last internode which carries the inflorescence is elongated. After a 2-phase cycle (bud -leafed orthotropic type) monocarpic sprouts of the group a) develop. A next state of specialisation is formed by the semi-rosette

Card 2/4

On the Morphogenesis of Vital Forms of Herbaceous Plants in ~~30~~20-120-1-54/6,
West Siberia

plants. Their main stem axis always is vegetative (monopodial). This morphogenetic line is terminated by true monopodial rosette forms. Their flower-carrying sprouts are leafless. The polycarpons are immediately followed by the monocarpons. Some plants can exist in the rosette phase also for several years, namely by monopodially regrowing. Also 2- and 3-phase sprout development exists. b) An early loss of the functional meaning of the tap-root leads to the formation of the vital form of the tuber-root plants. Here compared with the group a) the root-stock is more strongly developed, having an ortho- or plagiotropic position. From this a bundle of more or less numerous adventitious roots branches off. In the case of 1-year old plants of the group b) 2 sprout developments are observed: 1) 3-phase type (bud, rosette sprout, leafed elongated generative sprout), 2) the same, but the generative sprouts being leafless. c) The increase of the yearly growth of the root-stocks leads to this type of development. d) A further increase of the yearly growth of the root-stocks leads to this latter type. The most general conclusion out of this is that a relative independence is observed in the evolutionary

Card 3/4

On the Morphogenesis of Vital Forms of Herbaceous Plants in SOV/2o-12o-1-54/6
West Siberia

development of the over- and underground plant organs of various vital forms: While the morphogenesis of the former ones is determined by the conditions of the air-terrestrial environment, the development of the latter ones is guided by the conditions of the environmental ground. There are 9 references, which are Soviet.

ASSOCIATION: Glavnyy botanicheskiy sad Akademii nauk SSSR (Main Botanical Garden, AS USSR)

PRESENTED: February 3, 1958, by V. N. Sukachev, Member, Academy of Sciences, USSR

SUBMITTED: November 1, 1957

1. Plants--Analysis 2. Plants--Test results 3. Microorganisms

Card 4/4

30(1) SOV/26-59-4-41/43
AUTHOR: Golubev, V.N., Candidate of Biological Sciences
(Moscow)
TITLE: The West-Siberian Forest Steppe Early in Spring (V
Zapadnosibirskoy lesostepi ranney vesnoy)
PERIODICAL: Priroda, 1959, Nr 4, p 126 (USSR)
ABSTRACT: The author describes the early spring vegetation in
the West-Siberian forest steppe. In April and at the
beginning of May, the first green leaves or blossoms
are to be found with the Filipendula hexapetala Gil-
lib, Androsace septentrionalis G., Potentilla Humi-
fusa Willd., Sedum purpureum (L.) Schult., and Pusa-
tilla patens (L) Mill.
ASSOCIATION: Glavnyy botanicheskiy sad Akademii nauk SSSR (Moskva)
(Main Botanical Garden of the AS USSR)(Moscow)

Card 1/1

3(3)

SOV/26-59-5-47/47

AUTHOR: Golubev, V.N., Candidate of Biological Sciences
TITLE: The West-Siberian Forest-Steppe Belt in Spring-Time
PERIODICAL: Priroda, 1959, Nr 5, pp 127 - 128 (USSR)
ABSTRACT: The author describes the spring awakening in the
Central Siberian Belt.
ASSOCIATION: Tsentralno-chernozemnyy gosudarstvennyy zapovednik-
/Kurskaya oblast', Streletskiy rayon/ (The Central
Black-Soil State Preserve /Kursk Oblast', Stre-
letskiy District)

Card 1/1

GOLUBEV, V.N.

Some characteristics of the morphogenesis of life forms in herbaceous plants of the forest-meadow zone in connection with their evolution. Bot.shur. 44 no.12:1704-1716 D '59.
(MIRA 13:4)

1. TSentral'nochernozemnyy gosudarstvennyy zapovednik, pos. Streletskoye.

(Botany--Morphology)

GOLUBEV, V.N., kand. biol. nauk

Vegetation of the West Siberian forest-steppe zone. Priroda 48
no.6:126-127 Je '59. (MIRA 12:5)

1. Tsentral'no-chernozemnyy gosudarstvennyy zapovednik Kurskaya
oblast'.

(Siberia, Western--Botany)

GOLUBEV, V.N.

Morphogenesis of woody plants and paths of morphological evolution from trees to grasses. Biul.MOIP. Otd.biol. 64 no.5:
49-60 S-O '59. (MIRA 13:6)
(BOTANY--MORPHOLOGY) (WOODY PLANTS)

GOLUBEV, V.N.

Position of subshrubs in the evolution of life forms from trees to
grasses. Bul.Glav.bot.sada no.36:71-77 '60. (MIRA 13:7)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.
(Botany--Ecology)

GOLUBEV, V.N.

Changing aspects of vegetation in the forest-steppe of Western
Siberia. Trudy TSentr.-Chern. gos. zap. no.6:199-208 '60.
(MIRA 16:8)
(Siberia, Western--Phenology)

GOLUBEV, V.N.

Ecology and morphology of *Trifolium hybridum* L. Bot.zhur. 45
no.3:410-413 Mr '60. (MIRA 13:6)

1. TSentral'no-Chernozemnyy gosudarstvennyy zapovednik,
p/o Streletskoye.
(Alsike clover)

GOLUBEV, V.N.

Ecologico-morphological characteristics of life forms of herbaceous plants in the forest steppes of Western Siberia. Bot.skur. 45
no.7:979-996 J1 '60. (MIRA 13:7)

1. Tsentral'no-Chernozemnyy gosudarstvennyy zapovednik im. V.V. Alekhina, Streletskiy rayon Kurskoy oblasti..

(Omsk region--Botany--Ecology)
(Botany--Morphology)

GOLUBEV, V.N.

Possibilities of research in the Central Chernozem Preserve. Trudy
TSentr.-Chern. gos. zap. no.6:36-52 '60. (MIRA 16:8)
(Central Chernozem Preserve--Forestry research)
(Central Chernozem Preserve--Soil research)
(Central Chernozem Preserve--Botanical research)

GOLUBEV, V.N.

Some botanical and geographical problems in the formation of species
and the development of flora. Trudy TSentr.-Chern. gos. zap. no.6:
157-172 '60. (MIRA 16:8)

(Botany--Ecology) (Phytogeography)

GOLUBEV, V.N.

Supplement 2 to the list of vascular plants in the Central
Chernozem Preserve, Trudy TSentr.-Chern. gos. zap. no.6:
223-224 '60. (MIRA 1b:8)
(Central Chernozem Preserve—Botany)

GOLUBEV, V.N.

On the 25th anniversary of the Central Black Earth Preserve. Bot.
zhur. 45 no.9:1389-1394 S '60. (MIRA 13:9)

1. TSentral'no-Chernozemnyy gosudarstvennyy zapovednik im. prof.
V.V. Alekhina, Streletskiy rayon Kurskoy oblasti.
(Central Black Earth Preserve)

GOLUBEV, V.N., kand.biologicheskikh nauk

Forest-steppe at the end of summer. Priroda 49 no.8:125 Ag '60.
(MIRA 13:8)

1. Glavnyy botanicheskiy sad AN SSSR, Moskva.
(Steppe flora)

GOLUBEV, V.N.

Morphogenetic characteristics of tuberiferous plants. Biul. MOIP.
Otd. biol. 65 no.5:81-91 8-0 '60. (MIRA 13:12)
(TUBERS)

GOLUBEV, V.N.

Morphological and genetic characteristics of creeping plants.
Biol. MOIP. Otd. biol. 66 no.4:53-65 J1-Ag '61. (MIRA 14:7)
(CLIMBING PLANTS)

AFANAS'YEVA, Yevgeniya Andreyevna; GOLUBEV, Vitaliy Nikolayevich;
GERTSYK, V.V., red.

[Soil and botanical studies of the Streletskoye Steppe Preserve; Central Chernozem Preserve] Pochvenno-botanicheskii ocherk Streletskoi stepi; Tsentral'no-Chernozemnyi gosudarstvennyi zapovednik im. V.V.Alekhina. Kursk, Kurskoe knizhnoe izd-vo, 1962. 66 p. (MIRA 17:5)

GOLUBEV, V.N.

Ecological and biological knowledge of the vegetation of meadow
steppes. Bot.zhur. 47 no.1:25-44 Ja '62. (MIRA 15:2)

1. Tsentral'no-Chernozemnyy gosudarstvennyy zapovednik imeni
V.V.Alekhina, Streletskiy rayon, Kurskoy oblasti.
(Steppe flora)

GOLUBEV, V.N.

Methods for determining the absolute yield of the aerial
part of grasses in the meadow steppes. Bot. zhur. 48 no.9:
1338-1345 S '63. (MIRA 16:11)

1. Vostochno-Sibirskiy biologicheskiy institut Sibirskogo
otdeleniya AN SSSR, Irkutsk.

GOLUBEVA, I.V.; GOLUBEV, V.N.

Facultative development of root suckers in the clover *Trifolium montanum*
L. in meadow steppes. Bot.zhur. 49 no.11:1624-1628 N '64.

(MIRA 18:1)

1. Vostochno-Sibirskiy filial AN SSSR, Irkutsk.

AFANAS'YEVA, Ye.A.; BAZILEVICH, N.I.; NOSOVA, I. M.; GOLUBEV, V.N.; DOKHMAN,
G.I.; ARNOL'DI, K.V.; OBRAZTSOV, B.V.; NIKIFOROV, L.P.; GIBET, L.A.;
VORONOV, A.G.; SKOKOVA, N.N.

Brief news. Biul. MOIP. Otd. biol. 69 no.4:150-160 J1-Ag '64.
(MIRA 17:11)

GOLUBEV, Vitaliy Nikolayevich; KUL'TIASOV, Mikhail Vasil'yevich,
doktor biol. nauk, otv. red.; KUL'TIASOV, I.M., red.

[Ecological and biological characteristics of herbaceous
plants and plant communities of forest steppes] Ekologo-
biologicheskie osobennosti travianistykh rastenii i ra-
stitel'nykh soobshchestv lesostepi. Moskva, Nauka, 1965.
286 p. (MIRA 18:4)

GOLUBEV, V.N.; KOCHKINA, N.A. ✓

Consultations. Tekst.prom. 20 no.2:93 F '60.
(MIRA 13:6)

1. Master Kolobovskoy fabriki (for Golubev).
(Textile machinery)

41830

S/262/62/000/004 002/024

1014/1252

11./200

AUTHOR: Solntsev, V. P. and Golubev, V. N.

TITLE: The combustion of a gasoline air mixture behind a system of stabilizers

PERIODICAL: Referativnyy zhurnal, Silovyye ustanovki, no. 4, 1962, 27, abstract 42.4.148. Collection Stabilizatsiya plameni i razvitiye protsessa sgoraniya v turbulentnom potoke, M., Oborongiz, 1961, 109-127

TEXT: The combustion process is studied experimentally under conditions of interaction of turbulent traces formed by stabilizers. Experiments were carried out on a homogeneous gasoline-air mixture, with an air excess coefficient of 1.5, inlet air velocity of 50 m/sec and temperature of 120°C. The temperature fields and degree of turbulence are shown behind single stabilizers and systems of stabilizers. The dependence of pressure loss in the combustion chamber on the stabilizer layout in the system is given. The conclusion is that reduced resistance can be effected by displacement of the extreme stabilizers, leading to increased length of the combustion chamber. Intensified combustion can be achieved by acting on the turbulent trace behind the stabilizer by a flow of high intensity and smaller values of the degree of turbulence.

[Abstracter's note: Complete translation.]

Card 1/1

DRAGUN, A.P.; GOLUBEV, V.N.

Effect of the position of the cutting edge of boring tools on
their vibration resistance. Stan.i instr. 33 no.12:31 D
'62. (MIRA 16:1)
(Metal-cutting tools--Vibration)

ALTSYBEYEVA, A.I.; GOLUBEV, V.P.; MORACHEVSKIY, V.G.

Equilibrium elasticity of steam over a solution of surface-
active agents. Probl. fiz. atm. no.2:187-191 '63.
(MIRA 17:5)

SAKHAROVSKIY, N.A.; CHERKASHENINOV, V.I.; GOLUBEV, V.P.

Foreign technology. Gas. prom. 9 no.6:43-45 '64.

(MIRA 17:8)

15-1957-3-2612

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
p 8 (USSR)

AUTHOR: Rozanov, L.N., Golubev, V.S.

TITLE: Comparative Sections of the Kungur and Art1 Stages of
Bashkiriya and the Surrounding Regions (Sopostavleniye
razrezov kungurskogo i artinskogo yarusev Bashkiri1 i
prilegayushchikh oblastey)

PERIODICAL: Novosti neft. tekhniki. Geologiya, 1956, Nr 2, pp 10-12

ABSTRACT: A comparison of the sections of the Art1 and Kungur
stages of the Lower Permian platform part of Bashkiriya
with the stratigraphic columns of the surrounding regions
of Tatarsiya and the Chkalov and Molotov Oblasts may be
effected by a series of datum horizons in geologic and
electric-log sections. The Kungur deposits are sub-
divided into the Filippova, the Iren', and the
Solikamsk series. The top of the Art1 sequence is

Card 1/2

Comparative Sections of the Kungur and Arti (Cont.)

15-1957-3-2612

always drawn along the base of a well-defined oolitic dolomite (along the floor of datum horizon K_4). In western Bashkiriya an erosional break also occurs at this level. The base of datum horizon K_3 corresponds to the top of the Filippova series. The part of the section between the top of datum horizon K_3 and the bottom of K_1 forms the Iren' series; i.e. it contains all seven units of the Iren' series, which are distinguished in oil exploration work in the Molotov region. The upper part of the Kungur sequence is referred to the Solikamsk series. In the western part of Bashkiriya this series consists of transitional beds, but in Tatariya it is a third limestone unit.

Card 2/2

B.K.L.

GOLUBEV, V.S.; PANCHENKOV, G.M.

Layer method for approximate calculation of the dynamics of
equilibrium sorption and chromatography. Izv. Sib. otd. AN
SSSR no.3:45-53 '62. (MIRA 17:7)

1. Moskovskiy gosudarstvennyy universitet.